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EXAMINER

HOFFMAN, BRANDON S

ART UNIT	PAPER NUMBER
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2136

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12/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/049,217	Applicant(s) SAKO, YOICHIRO	
	Examiner Brandon S. Hoffman	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-12 and 14-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12 and 14-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 2, 4-12, and 14-44 are pending in this office action.
2. Applicant's arguments, filed October 1, 2007, have been fully considered but are moot in view of the new ground of rejection.

Claim Rejections

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

4. Claims 1, 2, 4, 5, 8-12, 14, 15, and 18-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Cookson (U.S. Patent No. 6,591,365).

Regarding claims 1 and 11, Cookson teaches a recording medium/method

- In which a plurality of management information are embedded and recorded into content data in a plurality of forms of different remaining intensities, the plurality of forms of different remaining intensity comprising a watermark of strong remaining intensity and a watermark of weak remaining intensity, wherein management information written into the watermark of the strong remaining

intensity is more severe than the management information written into the watermark of the weaker remaining intensity (col. 6, lines 6-25);

- Wherein said management information in the watermark of the strong remaining intensity remains even if a signal process is executed to the content data and said management information in the watermark of the weak remaining intensity is erased by executing a signal process to the content data (col. 7, lines 49-56);
- The watermark of strong remaining intensity being less likely than the watermark of weak remaining intensity to be altered by processing of the content data (col. 7, lines 49-56); **and**
- **Wherein no substantial processing of the content data is performed between the embedding of the watermark of strong remaining intensity and the embedding of the watermark of weak remaining intensity (col. 2, line 62 through col. 3, line 7).**

Regarding claims 2 and 12, Cookson teaches wherein said management information includes at least one of copy management information for managing a copying operation of the content data and reproduction management information for managing a reproducing operation of the content data (col. 6, lines 30-33).

Regarding claims 4 and 14, Cookson teaches wherein said form of a strong remaining intensity by which said management information is embedded in the content

data is a form such that said management information is spread-spectrum diffused and multiplexed into the content data (col. 2, lines 46-61).

Regarding claims 5 and 15, Cookson teaches wherein said form of the strong remaining intensity by which said management information is embedded in the data of said contents is a form such that said management information is inserted either at one of a first peak and a second peak in a predetermined range of the content data or at a position near one of said first peak and said second peak (col. 2, lines 46-61).

Regarding claims 8 and 18, Cookson teaches wherein among said plurality of management information, a managing condition of the management information embedded in the form of the strong remaining intensity by which said management information is embedded in the content data is more severe than that of the management information embedded in the form of the weak remaining intensity by which said management information is embedded in the content data (col. 7, lines 49-56).

Regarding claim 9, Cookson teaches wherein said management information is a copy management information, the management information embedded in the form of the strong remaining intensity by which said management information is embedded in the content data is a managing condition showing that copying is impossible (col. 6, lines 6-25).

Regarding claim 10, Cookson teaches wherein when said management information is reproduction management information, the management information embedded in the form of the strong remaining intensity by which said management information is embedded in the content data is a managing condition showing that reproduction is impossible (col. 6, lines 6-25).

Regarding claim 19, Cookson teaches a recoding method for a recording medium, comprising the steps of:

- Adding first management information to input content data (col. 2, line 62 through col. 3, line 7);
- Adding second management information whose remaining intensity is weaker than a remaining intensity of said first management information to the content data to which said first management information has been added (col. 2, line 62 through col. 3, line 7);
- Performing a recording signal process on the content data to which said first and second management information have been added, and recording resultant data into the recording medium (col. 7, lines 49-56);
- Wherein said first management information remains even if a signal process is executed to the content data and said second management information is erased by executing a signal process to the content data (col. 7, lines 49-56);

- The watermark of strong remaining intensity being less likely than the watermark of weak remaining intensity to be altered by processing of the content data (col. 7, lines 49-56); **and**
- **Wherein no substantial processing of the content data is performed between the embedding of the watermark of strong remaining intensity and the embedding of the watermark of weak remaining intensity (col. 2, line 62 through col. 3, line 7).**

Regarding claim 20, Cookson teaches wherein a managing condition by said first management information is more severe than a managing condition by said second management information (col. 6, lines 6-25).

Regarding claim 21, Cookson teaches wherein each of said first and second management information is copy management information, the managing condition by said first management information is a managing condition showing that copying is impossible (col. 6, lines 6-25).

Regarding claims 22 and 27, Cookson teaches a recoding and/or reproducing method for a recording medium, comprising the steps of:

- Reading out content data from the recoding medium in which at least first management information and second management information whose remaining intensity is weaker than a remaining intensity of said first management

information have been embedded and recorded in the data of said contents, and discriminating whether said second management information has been detected (col. 6, lines 6-25);

- Wherein when it is determined that said second management information has been detected, a recording and reproducing operation are controlled based on managing condition shown by said second management information (col. 7, lines 49-56);
- Wherein said first management information remains during the recording and reproducing operation and said second management information is erased during the recording and reproducing operation (col. 7, lines 49-56);
- The watermark of strong remaining intensity being less likely than the watermark of weak remaining intensity to be altered by processing of the content data (col. 7, lines 49-56); **and**
- **Wherein no substantial processing of the content data is performed between the embedding of the watermark of strong remaining intensity and the embedding of the watermark of weak remaining intensity (col. 2, line 62 through col. 3, line 7).**

Regarding claims 23 and 28, Cookson teaches wherein when it is determined that said second management information is not detected, the recording and/or reproducing operation are controlled based on said first management information (col. 6, lines 6-25).

Regarding claims 24 and 31, Cookson teaches wherein the managing condition by said first management information is more severe than a managing condition by said second management information (col. 6, lines 6-25).

Regarding claims 25 and 33, Cookson teaches

- Wherein when each of said first and second management information is copy management information, the managing condition by said first management information is a managing condition showing that copying is impossible (col. 6, lines 6-25), and
- When it is determined that said second management information has been detected, the recording operation is controlled based on said second management information, and when it is determined that said second management information is not detected, the recording operation is inhibited based on said first management information (col. 6, lines 6-25).

Regarding claims 26 and 34, Cookson teaches

- Wherein when each of said first and second management information is reproduction information, the managing condition by said first management information is a managing condition showing that reproduction is impossible (col. 6, lines 6-25), and

- When it is determined that said second management information has been detected, the reproducing operation is controlled based on said second management information, and when it is determined that said second management information is not detected, the reproducing operation is inhibited based on said first management information (col. 6, lines 6-25).

Regarding claim 29, Cookson teaches wherein when it is determined that said first management information is not detected, the recording and/or reproducing operation is controlled based on said second management information (col. 6, lines 6-25).

Regarding claim 30, Cookson teaches wherein when it is determined that neither said first nor second management information is detected, the recording and/or reproducing operation is controlled based on additional information added to the content data (col. 6, lines 6-25).

Regarding claim 32, Cookson teaches

- Wherein when each of said first and second management information is copy management information, the managing condition by said first management information is a managing condition showing that copying is impossible (col. 6, lines 6-25), and

- When it is determined that said second management information has been detected, the recording operation is controlled based on said second management information, and when it is determined that said second management information is not detected, the recording operation is inhibited based on said first management information (col. 6, lines 6-25).

Regarding claim 35, Cookson teaches a copy control method for contents data, the method comprising the steps of:

- Discriminating whether second management information has been detected from the content data in which at least first management information and the second management information whose remaining intensity is weaker than a remaining intensity of said first management information have been added (col. 6, lines 6-25); and
- When it is determined that said second management information has been detected, controlling a copying operation of the data of said contents based on a managing condition shown by said second management information (col. 6, lines 6-25);
- Wherein said first management information is copied during the copying operation and said second management information is not copied during the copying operation (col. 7, lines 49-56);

- The watermark of strong remaining intensity being less likely than the watermark of weak remaining intensity to be altered by processing of the content data (col. 7, lines 49-56); **and**
- **Wherein no substantial processing of the content data is performed between the embedding of the watermark of strong remaining intensity and the embedding of the watermark of weak remaining intensity** (col. 2, line 62 through col. 3, line 7).

Regarding claim 36, Cookson teaches wherein when it is determined that said second management information is not detected, the copying operation of the data of said contents is controlled based on said first management information (col. 6, lines 6-25).

Regarding claim 37, Cookson teaches wherein a managing condition by said first management information is more severe than that by said second management information (col. 6, lines 6-25).

Regarding claim 38, Cookson teaches

- Wherein when each of said first and second management information is copy management information, the managing condition by said first management information is a managing condition showing that copying is impossible (col. 6, lines 6-25), and

- When it is determined that said second management information has been detected, the copying operation of the data of said contents is controlled based on said second management information, and when it is determined that said second management information is not detected, the copying operation of the content data is inhibited based on said first management information (col. 6, lines 6-25).

Regarding claim 39, Cookson teaches wherein when said second management information permits the copying of the contents data the copying operation of the content data is permitted based on said second management information, and said second management information which is added to said content data which is copied is rewritten to a managing condition for inhibiting the copying of the content data (col. 6, lines 6-25).

Claims 6, 7, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cookson (USPN '365) in view of AAPA (Applicant's admitted prior art).

Regarding claims 6 and 16, Cookson teaches all the limitations of claims 1 and 3, & 11 and 12, respectively, above. However, Cookson does not specifically teach wherein said form of the weak remaining intensity by which said management

information is embedded in the content data is a form such that said management information is inserted into lower bits of the content data.

AAPA teaches wherein said form of the weak remaining intensity by which said management information is embedded in the content data is a form such that said management information is inserted into lower bits of the content data (specification, page 1, last paragraph).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine embedding into lower bits of the content data, as taught by AAPA, with the medium/method of Cookson. It would have been obvious for such modifications because lower bit embedding of watermarks is an easy way to provide a weak watermark.

Regarding claims 7 and 17, Cookson teaches all the limitations of claims 1 and 3, & 11 and 12, respectively, above. However, Cookson does not specifically teach wherein said form of the weak remaining intensity by which said management information is embedded in the content data is a form such that said management information is inserted into a high-order coefficient at the time when the content data have been compressed.

AAPA teaches wherein said form of the weak remaining intensity by which said management information is embedded in the content data is a form such that said management information is inserted into a high-order coefficient at the time when the content data have been compressed (specification, page 1, last paragraph).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine embedding into high-order coefficients when the content data is being compressed, as taught by AAPA, with the medium/method of Cookson. It would have been obvious for such modifications because high-order coefficient embedding of watermarks during compression is an easy way to provide a weak watermark.

Claims 40-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cookson (USPN '365) in view of Kuroda et al. (U.S. Patent No. 6,633,723).

Regarding claim 40, Cookson teaches a reproducing apparatus for reproducing a recording medium, comprising:

- At least first management information and second management information whose remaining intensity is weaker than remaining intensity of said first management information have been embedded and recorded (col. 6, lines 6-25);
- Detecting said second management information from the content data read out from said recording medium by said head (col. 6, lines 6-25); and

- A discriminating circuit to which a detection result by said detecting circuit is supplied and which controls an on/off operation of said switching circuit unit based on a managing condition shown by said second management information when the detection result showing that said second management information has been detected by said detecting circuit is supplied thereto (fig. 1);
- Wherein said first management information remains even if a signal process is executed to the content data and said second management information is erased by executing a signal process to the content data (col. 7, lines 49-56);
- The watermark of strong remaining intensity being less likely than the watermark of weak remaining intensity to be altered by processing of the content data (col. 7, lines 49-56); **and**
- **Wherein no substantial processing of the content data is performed between the embedding of the watermark of strong remaining intensity and the embedding of the watermark of weak remaining intensity (col. 2, line 62 through col. 3, line 7).**

Cookson does not specifically show the circuits described in the reproducing apparatus.

Kuroda et al. teaches a read head for reading out content data (fig. 9, ref. num 51), a signal processing unit for performing a signal process to the content data read out from said recording medium by said head (fig. 9, ref. num 60 and col. 22, lines 51-53), a

switching circuit unit to which an output signal from said signal processing unit is applied (fig. 9, ref. num 57 and col. 22, lines 11-25), detecting circuit for detecting management information (fig. 9, ref. num 52 and col. 21, lines 35-42), and a discriminating circuit (fig. 9, ref. num 56).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine specific circuits of a reproducing apparatus, as taught by Kuroda et al., with the apparatus of Cookson. It would have been obvious for such modifications because the circuits of Kuroda et al. provide a tangible reproducing device that, when combined with Cookson, provide at least two watermarks used for managing reproducing of generations of data.

Regarding claim 41, Cookson as modified by Kuroda et al. teaches wherein when it is determined that said second management information is not detected, the on/off operation of said switching circuit unit is controlled based on said first management information (see col. 6, lines 6-25 of Cookson).

Regarding claim 42, Cookson as modified by Kuroda et al. teaches further comprising a converting unit to which the output signal from said signal processing unit is supplied and which converts said supplied output signal into an analog signal (see fig. 9, ref. num 64 of Kuroda et al.), and wherein said switching circuit unit has a first switching circuit to which the output signal from said signal processing unit is supplied

and a second switching circuit to which an output signal from said converting unit is supplied (see fig. 9, ref. num 57 of Kuroda et al., 57 goes to 58 and 64).

Regarding claim 43, Cookson as modified by Kuroda et al. teaches wherein when each of said first and second management information is copy management information on/off operations of said first and second switching circuits are controlled based on a managing condition shown by said second management information (see col. 6, lines 6-25 of Cookson), and when said second management information cannot be detected, said first switching circuit is turned off based on said first management information (see col. 6, lines 6-25 of Cookson).

Regarding claim 44, Cookson as modified by Kuroda et al. teaches wherein when each of said first and second management information is reproduction management information, on/off operations of said first and second switching circuits are controlled based on managing conditions shown by said second management information (see col. 6, lines 6-25 of Cookson), and when said second management information cannot be detected, said second switching circuit is turned off based on said first management information (see col. 6, lines 6-25 of Cookson).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser G. Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brandon Hoffman/

BH

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